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Assessment of the Higher Education Needs of Snohomish, Island, and Skagit Counties (SIS)

Preliminary Staff Analysis of Draft Final Report The Statewide Context

Introduction

Staff are in the process of developing a written recommendation that will go to the full board for a decision on November 16. This report contains preliminary analysis of the consultant's draft final report of the higher education needs of the SIS region. This report was preceded by a briefing report on the study which appeared in the September 27, 2006 Higher Education Coordinating Board (HECB) packet. A draft of the final report accompanies this preliminary analysis. On November 2, staff will confer with the education committee on a recommendation to the full board. The report and a recommendation from the board are due to the Legislature by December 1, 2006.

On October 10, HECB staff met with the Office of Financial Management (OFM) forecasting group and Senate and House higher education analysts to review the forecasting methodology used by the project consultants. The final report will contain additional information at the request of the methodology meeting attendees.

Background

The 2005-07 state capital budget directed the HECB to evaluate higher education and workforce training needs in Snohomish, Island, and Skagit counties and to recommend solutions to the Legislature and governor.

Specifically, the law as enacted calls for the board to:

- Assess the higher education needs in the three-county area.
- Recommend the type of institution or institutions to be created or expanded to address those needs.
- Assess potential sites for an institution.

- Identify costs and a process for completing a master plan for higher education expansion in the study area.

The HECB project team and consultant team of NBBJ and MGT of America consulted with a 13-member local advisory committee, including state legislators, the Snohomish County executive, the mayor of the City of Everett, and two business or education leaders from each of the three counties. In addition to convening the Local Advisory Committee required by the legislation, the project team also worked with members of area institutions on a technical sounding board known as the Project Coordination Team.

Public input was received from two series of town hall meetings held in November 2005 to discuss higher education needs in the region and in May 2006 to discuss alternatives. An interim report was presented to the board at its January 2006 meeting and delivered to the Legislature as required by the authorizing legislation.

Access to higher education in north King and Snohomish, Island, and Skagit Counties has been the subject of numerous studies over the past 18 years, beginning in 1988 when the HECB recommended an upper-division branch campus be established in the Bothell-Woodinville area. Since then, a proposal to develop additional resources or further study of need in the SIS region has occurred on average every two to three years.

Statewide Context

The budget language authorizing the analysis of SIS provides specific instruction to focus on the needs of the three-county region. However, given the mission of the HECB to make decisions in the best interest of the state, representing the “broad public interest above the interests of the individual colleges and universities,” the study also looked at potential solutions that would address statewide concerns. The needs of students were paramount in the examination of potential solutions.

In addition to specific study findings, the project and consultant team made use of past studies, the HECB *2004 Strategic Master Plan for Higher Education*, the HECB *State and Regional Needs Assessment* revised in February 2006, and the study activities of Washington Learns, as well as other higher education working groups such as the Prosperity Partnership.

Strategic Master Plan for Higher Education

The 2004 strategic master plan lays out two goals for the state’s system of higher education. First is to increase the number of students who earn a college degree. Second is to ensure Washington’s higher education system is responsive to regional and statewide needs. The SIS study provides an analysis of the enrollment requirements and programmatic mix to serve future students from the three-county region, as well as an analysis of the type of higher education resource to best respond to the region’s economic needs and opportunities.

State and Regional Needs Assessment

At the state level, the HECB analyzes higher education requirements to meet the needs of students, employers, and communities in the *State and Regional Needs Assessment*. This report, published for the first time in fall of 2005, identifies a substantial statewide need for growth in Washington's higher education system in order to meet increasing demand for degrees among students, and to serve communities and employers by providing an educated citizenry and a highly-trained and educated workforce that can readily adapt to changing conditions.

Three regions within Washington are identified in the *State and Regional Needs Assessment* as experiencing the most significant enrollment pressure based upon population growth: Southwest Washington, King County, and the Snohomish, Island, and Skagit County region. Of these three regions, SIS is the only identified region that does not currently have a baccalaureate level institution that could accommodate the anticipated demand for higher education.

Staff Comment on Regional Needs

The findings of regional needs presented in the SIS study are consistent with the findings of the state and regional needs assessment. At the state level, demand for additional degrees in key fields such as computer science, engineering, and health care is identified in the *State and Regional Needs Analysis*. There is also a finding in both reports as well as in public testimony in the town hall meetings for continued growth in the humanities, social science, and life and physical sciences to best prepare students for work in a changing economy and continued learning.

Washington Learns and Other Higher Education Work Groups

In their report to the Washington Learns Task Force on Higher Education, the consultant group NORED also identifies a need for continued growth in our higher education. Their report compares the degree production in Washington to ten "Global Challenge" states (including Washington). The study finds that Washington is well below the national median in terms of the number of bachelor's and graduate degrees produced, confirming a position noted in numerous other studies and rankings. In addition, the report supports the need to focus additional resources on high-demand fields similar to those outlined in the HECB needs assessment and the SIS study.

The Prosperity Partnership—a higher education working group within a coalition of more than 200 organizations implementing a regional economic strategy for central Puget Sound—also finds that increasing higher education opportunities is a key to growing jobs in the region. Fields that are driving both the state and regional economy within the context of a global economic marketplace—computer sciences; engineering; life sciences; medical research; nursing; and secondary teachers in math, science, English as a Second Language, and special education—should be the focus of increased degree production. The Prosperity Partnership estimates that almost half of the job openings in Washington between 2007 and 2012 will be in these fields. In addition, associate degree production in the fields of medical diagnosing and treating, and health

technologists and technicians is cited. These findings are consistent with the findings of the SIS survey and interview of the region's employers, students, and counselors.

Net Migration of Highly Educated Workers

Washington is regarded as having one of the most highly-educated populations in the country when this measure is calculated by the number of baccalaureate degree holders as a percentage of total population. However, Washington ranks in the bottom quartile in terms of production of bachelor's degrees. This disparity is explained by the net in-migration of highly-educated workers who earned their degrees elsewhere. Between 1990 and 2000, Washington imported roughly 74,000 people who held a bachelor's degree or higher. This in-migration is credited for mitigating the higher education system's shortfall in baccalaureate degree production, especially in high-demand fields. Of the top fifteen occupations in terms of total net in-migration, seven are occupations in which more than half the workers coming to the state hold at least a bachelor's degree¹.

Statewide Capacity for Growth at the Baccalaureate Level and Above

Our existing public baccalaureate institutions serve approximately 89,000 students. Adding an additional 25,000 students to meet the HECB estimate of demand for degrees in 2015 would require growing all the public baccalaureate institutions, including branch campuses, to their growth limit. The resulting distribution of available enrollment options may not be ideally situated to respond to increasing student and employer demand in the regions of the state experiencing the fastest growth.

Table 1: Statewide Enrollment Benchmarks and Capacity Limit²

Benchmark	2015-2016 FTE Enrollment Level (public four-year)
OFM Estimate (Current Participation)	100,966
HECB Estimate (Demand for Degrees)	115,973
HECB Estimate based on Global Challenge State Median Degree Production	123,657
Capacity Limit of Existing Public Baccalaureate Institutions	117,249

¹ These occupations include: Computer Specialists, Health Diagnosing and Treating Practitioners, "Other" Managers, Business Operations Specialists, Operations Specialists Managers, Engineers, and Information and Records Clerks.

² HECB assessment of FTE required to meet Benchmark Degree Production.

Needs Analysis

The consultant's report takes a step beyond this statewide analysis of need to look at the impact of a set of alternative policy goals for the SIS region. Five policy options are described in the report.

The option selected by the HECB project team, in consultation with the Local Advisory Committee and the Project Coordination Team, would move the region to state average participation rates at the upper-division and graduate levels by 2015, and to the national average by 2025. Lower-division is projected at current participation rates, since lower-division participation in Washington is higher than the national average. The assumption is that lower-division will continue to participate as it has in the past.

In order to make the estimates provided in the report, enrollments are broken down into three levels:

- **Lower-division:** In all estimates, the lower-division FTEs are estimated based on maintaining the current level of service (i.e., current participation rate) to a rapidly-growing region.
- **Upper-division** estimates include a component to address population growth, and an additional component based on the policy option described above.
- **Graduate level** estimates are made in the same fashion as upper-division.

“Maintaining the current level of service” means the same participation rate as currently exists, while also responding to the increasing demand based on population growth. This is similar to the approach used by the Office of Financial Management to assess future enrollment demand at the state level. The “unmet need” takes the total of these estimates and subtracts the portion of need that the key institutions serving the region could add during the planning horizon.

Staff Comments on Methodology

The methodology employed by the consultants, similar to that used in previous studies, was reviewed with the members of the Project Coordination Team, the Office of Financial Management, and Senate and House higher education budget staff. While there are limitations on some source data, these are constraints that all researchers face with the state projections. We support the methodology used for this study.

Student, Employer, and Community Demand for Programs

The HECB project directors were active participants in the interview and town hall meeting process. They led seven town hall meetings and numerous focus groups, participated in the employer and student surveys and interviews several times, and received feedback on the type of classes and majors desired within the region. With the exception of a few very specific majors that would be beyond the scope of any institution other than a major research university, those

participating in meetings, surveys and interviews consistently expressed a need for baccalaureate-level majors in:

- Business, accounting, and finance
- Computer science and network systems
- Engineering and engineering technology – all disciplines
- Nursing and allied health and medical professions
- Education (teaching), special education, middle and high school
- Project and operations management and planning
- Hospitality (Skagit)

The Polytechnic

The need for a polytechnic focus in addition to providing access to liberal arts programs in the region came from the needs analysis, as well as ongoing feedback from members of the Local Advisory Committee.

During conversations with the public and members of the committee, it became clear that there were many ideas of the definition of a polytechnic. The project team's working definition is "an institution of higher education specializing in the teaching of the applied sciences." There are only a handful of pure polytechnic universities in the United States, although there are more in other countries. California Polytechnic State University, San Luis Obispo, and California Polytechnic State University-Pomona are the closest baccalaureate polytechnics and draw some students from the state of Washington. We believe that Cal Poly-Pomona, which serves approximately 60 percent of its student body from the surrounding community, offers the best model to emulate for the region and state, and there are other examples nationwide from which to learn.

Cal Poly-Pomona counts both Washington State University and the University of Washington among its peer institutions, in addition to other pure polytechnic universities such as Polytechnic University in Brooklyn and Rensselaer Polytechnic Institute, the oldest polytechnic in the United States, based in Troy, New York. These institutions have done considerable study on redefining their roles in the midst of increasing complexity of the world along with the expanding impact of science and technology on society and values.

Technology in the Classroom

We are living during a time of rapid technological and communication changes when a fax machine is nearly outmoded and e-mail is described by students as being for "old people."³ The use of technology in the classroom is a topic worthy of additional study, both in regard to

³ The Chronicle of Higher Education, Information Technology, from the issue dated October 6, 2006, <http://chronicle.com/free/v53/i07/07a02701.htm>

application in the SIS region and as a method to reduce the need for building ever more classroom space throughout the state and for convenient communication. We can benefit from the experiences and successes of the University of Illinois at Springfield, the University of Central Florida, and other institutions who have made the technological shift.

Distance learning or hybrid models hold promise for improving conversation, debate, and presentations. As a result of intensive reading and writing, students improve skills through practice. In addition, the lives of students—both within the traditional college age range and working professionals—demand the convenience and mobility that distance learning provides.

The consultant's draft final report calls for "development/expansion of programs to respond to the geographic and cultural diversity of the region, including elements of local center, distance learning, and other modes of service delivery." This element holds additional potential to change the way classes are conducted but needs to be investigated further for solutions. However, a change in service delivery does not come without cost. Students will need to have the same basic foundation available that they would have on campus: an extensive library, writing labs, math labs, learning support, and well-trained faculty members. Several four-year public baccalaureate institutions have created successful distance learning programs that could be used as a model for hybrid delivery of courses.

A campus component to higher education helps students bond with each other and with the institution and is not intended to be replaced by technology. Building a hybrid model that includes some campus attendance along with intensive online course delivery requires more planning and creative course design. The extent to which campus attendance or online delivery can be used will depend on the level and nature of the courses. Corporations use a blended approach for managerial and executive training. Similarly, some higher education institutions have found that advanced degrees that include significant discussion and collaboration (group work) benefit from short stretches of campus attendance.

Options Considered to Meet Demand

The following eight options were considered as potential scenarios to meet the long-term needs of the region:

1. Four-Year Regional (own board)
2. Four-Year Polytechnic (own board)
3. Four-Year System Regional
4. Four-Year System Polytechnic
5. Upper-Division and Grad Branch Campus
6. Upper-Division and Grad (own board)
7. University Center Model
8. Community College to Four-Year

Staff Comment on Options and Locale

Staff acknowledge the varied success of some of the options elsewhere in the state and in particular the successful operation of the university center model in several locations, but agree with the consultant that it is not the right model for meeting the long-term higher education needs of the region. We also agree that North Everett/Marysville is the appropriate location to serve the largest concentration of traditional college-age students between 17 and 24, as well as placebound adults who are seeking to complete a bachelor's or master's degree.

Local Advisory Committee Recommended Option

The Local Advisory Committee voted on a preferred alternative: an unaffiliated four-year polytechnic. Individual members' reasons varied; some felt that a new public baccalaureate would be more responsive to local and regional needs, while others agreed with the consultants' assessment that expansion of current programs and methods of teaching might not be the most responsive way to move technological higher education into the 21st century. In addition, the consultants and some members of the Local Advisory Committee expressed that a branch campus or system campus might not be able to compete with the needs or priorities of the main campus.

Consultant Recommendation

While the Local Advisory Committee endorsed investment in a new independent four-year residential university with an economic development-driven polytechnic focus, the consultant teams recommend concentration on the target of significant unmet need, with continued planning efforts to determine the exact governance structure, e.g., independent vs. affiliation with an existing institution.

The consultants' specific recommendations are:

- Investment in a new four-year university with a polytechnic focus, located between North Everett and Marysville to minimize travel distances and times for a majority of students, faculty, and staff.
- Continued investment/development of the University of Washington's commuter campus in Bothell. Buildout at 6,000 students is part of the solution to meet the higher education needs for both King County and parts of the SIS area.
- Continued investment in each of the area's community colleges, including expansion of lower-division polytechnic opportunities, workforce training, and adult basic education at the area's community colleges.
- Development and expansion of programs to respond to the geographic and cultural diversity of the region, including elements of local centers, distance learning, and other modes of service delivery.

Staff Comments on Affiliated vs. Unaffiliated

We believe that perceived shortcomings with affiliation may be overcome and that the future of a polytechnic university for the region and state will benefit from affiliation with an existing public baccalaureate institution. These benefits include a quicker start-up time, an easier accreditation process, and the appeal of “branding” that comes with the excellent reputations that both the research universities and the regional universities possess. Past success, innovative and visionary leadership, and an interest in establishing a new polytechnic which will operate in a manner consistent with a global economy focus necessary for success in the 21st century will dictate which schools may be interested in affiliation. Leadership and a faculty with a different focus, training, and interest will be important for a new institution.

Staff Comment on Everett University Center

The consultants’ recommendation includes a proposal to operate the Everett University Center in cooperation with Skagit Valley College which will itself provide a “Higher Education Learning Center.” We agree that the Everett University Center, described in detail in the report submitted to the Legislature in response to ESSHB 1794, is a mid- to short-term solution to the higher education needs of the region and that it has an important role to play in the region – perhaps in a modified or relocated form.

Moving the location of the university center to Skagit Valley College in Mount Vernon, where it would be more accessible to north Snohomish and north Island County residents, is an option that staff are considering. The timing for the relocation would coincide with the opening of a campus for the proposed polytechnic in the Marysville/Everett area. Vacated space on the Everett Community College campus would be absorbed by the expected continued growth of FTEs. That expected growth, along with growth in the other area community colleges, should be encouraged and funded. It is necessary to meet the needs of the region based on population growth.

Staff Recommendation

Staff continue to analyze the consultants’ report and feedback received at the board meetings and other venues in order to craft a detailed recommendation that can be implemented in a phased approach. A final staff recommendation will be presented at the November board meeting. It is expected that the final recommendation will likely contain the elements listed below.

It is our belief that the final recommendation should include:

1. Growth in the three area community colleges to accommodate additional students in adult basic education, workforce training, and academic transfer-oriented programs.
2. Development of a new institution affiliated with an existing public baccalaureate institution capable of delivering a program array consistent with a polytechnic institution. Specifically, the polytechnic must draw on technology to provide the

most efficient and effective delivery of curriculum in a high-tech collaborative environment designed to meet the needs of tomorrow's students.

3. Lower-division classes and freshmen admission should be phased in once a permanent campus is constructed. The affiliated public baccalaureate institution should be specifically charged with the responsibility of outreach to outlying areas.
4. Increased emphasis on distance learning and hybrid courses that would reduce the amount of time spent on a specific campus location, particularly for outlying areas.
5. Development of university centers in Island and Skagit Counties at Skagit Valley College, and continued development of a more robust facility at Skagit Valley College, Whidbey Island.
6. Gradual transition of the Everett University Center to the new higher education institution and the university center locations in Island and Skagit Counties.

In short, our recommendation is shaping to:

- **Affiliation**, because it will be faster to bring on-line, easier for accreditation, and carries with it name brand recognition among prospective students.
- **Polytechnic**, because there is regional demand as well as a statewide need for trained state residents to compete in a global economy.
- **Phased Four-Year**, starting with upper-division and graduate studies where the need is greatest, while building a thoughtful curriculum for lower-division courses. While partially a combined affordability and time issue of starting a four-year institution versus an upper-division and graduate model, this approach will also allow a progressive expansion of majors. With careful planning and broad-based support in the community, a four-year institution should not take as long to develop as the branch campuses did. Freshmen should be added as soon as a permanent campus is occupied.